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| APPLICATION NO. | FILING DATE                        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------------------------------|----------------------|---------------------|------------------|
| 10/618,365      | 07/10/2003                         | Koji Nakamichi       | FUJY 20.508         | 6742             |
|                 | 7590 11/28/200<br>CHIN ROSENMAN LI |                      | EXAMINER            |                  |
| 575 MADISON     | I AVENUE                           |                      | ZAIDI, SYED         |                  |
| NEW YORK, N     | NY 10022-2383                      |                      | ART UNIT            | PAPER NUMBER     |
|                 |                                    |                      | 2616                |                  |
|                 |                                    |                      |                     | •                |
|                 |                                    |                      | MAIL DATE           | DELIVERY MODE    |
|                 |                                    |                      | 11/28/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| - 1  |   |  |  | RS                                      |  |  |
|--|---|--|--|---|--|--|
| •  |   | Application No.  | Applicant(s)   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |  |
| Office Action Summary                                |   | 10/618,365   | NAKAMICHI ET AL.   |   |  |  |
|  |   | Examiner   | Art Unit   |   |  |  |
|  |   | Syed Zaidi   | 2616   |   |  |  |
| Period fo  | The MAILING DATE of this communication or Reply   | n appears on the cover sheet wi  | th the correspondence address  |   |  |  |
| WHI(<br>- Exte<br>after<br>- If NO<br>- Failt<br>Any | CHEVER IS LONGER, FROM THE MAILIN ensions of time may be available under the provisions of 37 C or SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ned patent term adjustment. See 37 CFR 1.704(b). | NG DATE OF THIS COMMUNIC<br>FR 1.136(a). In no event, however, may a re-<br>on.<br>period will apply and will expire SIX (8) MON'<br>statute, cause the application to become AB | CATION.  apply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133). |   |  |  |
| Status   |   |  | •  |   |  |  |
| 1)⊠  | Responsive to communication(s) filed on   | 10 September 2007.   |  |   |  |  |
| 2a) <u></u> ☐  | This action is <b>FINAL</b> . 2b)⊠  | This action is non-final.  |  |   |  |  |
| 3)[  | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |   |  |  |
|  | closed in accordance with the practice un   | der <i>Ex parte Quayle</i> , 1935 C.D  | . 11, 453 O.G. 213.  |   |  |  |
| Disposit   | tion of Claims  |  |  |   |  |  |
| 4)⊠  | Claim(s) 1-15 is/are pending in the applica   | ation.   |  |   |  |  |
|  | 4a) Of the above claim(s) is/are wit  | hdrawn from consideration.   |  |   |  |  |
| · · · · · · · · · · · · · · · · · · ·                | Claim(s) is/are allowed.  |  |  |   |  |  |
|  | Claim(s) <u>1-15</u> is/are rejected.   |  |  |   |  |  |
|  | Claim(s) is/are objected to.  |  |  |   |  |  |
| 8)[_]  | Claim(s) are subject to restriction a   | and/or election requirement.   |  |   |  |  |
| Applicat   | tion Papers   |  |  |   |  |  |
| 9)[  | The specification is objected to by the Exa   | aminer.  |  |   |  |  |
| 10)⊠   | 10)⊠ The drawing(s) filed on <u>07/10/2003</u> is/are: a)  accepted or b)  objected to by the Examiner.   |  |  |   |  |  |
|  | Applicant may not request that any objection to   | •  | ` '  |   |  |  |
| 44   | Replacement drawing sheet(s) including the c  | ·  | , , ,  |   |  |  |
| 11)[   | The oath or declaration is objected to by the   | ne Examiner. Note the attached   | Office Action of form P1O-152.   |   |  |  |
| Priority   | under 35 U.S.C. § 119   |  |  |   |  |  |
| 12)  | Acknowledgment is made of a claim for fo  | reign priority under 35 U.S.C. §   | 119(a)-(d) or (f).   |   |  |  |
| a)   | )   |  |  |   |  |  |
|  | 1. Certified copies of the priority docu  | ments have been received.  |  |   |  |  |
|  | 2. Certified copies of the priority docu  |  |  |   |  |  |
|  | 3. Copies of the certified copies of the  | · · · ·  | received in this National Stage  |   |  |  |
| *  | application from the International B<br>See the attached detailed Office action for   |  | received   |   |  |  |
| ·  | See the attached detailed Office action for   | a list of the certified copies flot  | received.  |   |  |  |
| Attachme   |   |  |  |   |  |  |
|  | ice of References Cited (PTO-892)<br>ice of Draftsperson's Patent Drawing Review (PTO-94  | · <del></del>  | Summary (PTO-413)<br>s)/Mail Date  |   |  |  |
| 3) 🔲 Info  | mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date   |  | nformal Patent Application   |   |  |  |

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## **DETAILED ACTION**

## **Response to Arguments**

Applicant's arguments filed September 10, 2007 have been fully considered but they are moot, with respect to the rejection of claims 1-15. In view of new grounds of rejection been presented in this office action as such may response to applicant's argument is moot.

Claims 1, 3, 6, 7, 8, 9, 10, 13, 14 and 15 have been amended.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., (U.S. Patent # 7,263,100 B1) in view of Beshai. (US Publication # 2002/0080790 A1).

Consider claim 1, Kim et al., clearly show and disclose a wide area load sharing control system comprising: a module determining a distribution ratio at which an input traffic to an ingress edge node is distributed to each of a plurality of paths (Paragraph 0039 lines 1-17 and figure # 1 element 30) set up between said ingress edge node and an egress edge node (Paragraph 0039 lines 1-17 and figure # 1 element 35) that correspond to a traffic engineering section in a network (Paragraph 0026 lines 1-17 and

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figure # 1 element 40); and a module indicating which unit, a sharing control unit corresponding to said ingress edge node or other concentration control unit, executes a process of determining the distribution ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths. However, **Kim et al.**, fails to disclose ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths.

In the same field of endeavor, **Beshai**. clearly shows and discloses ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths (Column 13 line 43-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths as taught by **Beshai**. in the method of **Kim et al.**, for the purpose of achieving a statistic information, a traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

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Consider claim 2, and as applied to claim 1 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system comprising: a wide area load sharing control system, wherein said indicating module indicates which unit, said sharing control unit or said concentration control unit, takes charge of the determining process in accordance with load states of said sharing control unit and of said concentration control unit (Paragraph 0042 lines 1-10 and figure # 2 element 110).

Consider claim 3, and as applied to claim 1 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system comprising a wide area load sharing control system (Paragraph 0042 lines 1-10 and figure # 2 element 110), wherein said concentration control unit is a network control device concentrated controlling a plurality of nodes including said ingress edge node (Paragraph 0043 lines 1-11 and figure # 2 element 150): and said egress edge node existing in the traffic engineering section of the network (Paragraph 0044 lines 1-21 and figure # 1 elements 130, 135).

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Consider claim 4, and as applied to claim 3 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system comprising, a wide area load sharing control system (Paragraph 0042 lines 1-10 and figure # 2 element 110), wherein said indicating module is provided in a state monitoring device outside said network control device (Paragraph 0044 lines 1-21 and figure # 1 elements 130,135 and vpn path140).

Claim 5, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., (U.S. Patent # 7,263,100 B1) in view of Beshai. (US Publication # 2002/0080790 A1) further in view of Meempat et al., (U.S. Patent # 6,904,017 B1).

Consider claim 5, and as applied to claim 1 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system comprising, a wide area load sharing control system (Paragraph 0042 lines 1-10 and figure # 2 element 110), wherein the network is an MPLS-based label switching network.

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However, **Kim et al.**, as modified by **Beshai**. fails to disclose the network is an MPLS-based label switching network.

In the same field of endeavor, **Meempat et al.**, clearly shows and discloses network is an MPLS-based label switching network (Column 1 line 51-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the network is an MPLS-based label switching network. as taught by Meempat et al., in the method of Kim et al., as modified by Beshai. for the purpose of achieving a statistic information, a traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

Consider claim 6, and as applied to claim 1 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system comprising, a wide area load sharing control system (Paragraph 0042 lines 1-10 and figure # 2 element 110), wherein when said sharing control unit corresponding to said ingress edge aeries-node gathers statistic information showing a load state in

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the network (Paragraph 0042 lines 1-10 and figure # 2 element 110) said sharing control unit gathers directly the statistic information from said nodes capable of using a notification message based on a specified protocol, and gathers, through said concentration control unit, the statistic information from said nodes incapable of using the notification message based on the specified protocol (Paragraph 0044 lines 1-21 and figure # 2 element 110).

Consider claim 7, Kim et al., clearly show and disclose a wide area load sharing control system comprising: a A wide area load sharing control system comprising: a statistic information gathering module obtaining from respective nodes, as statistic information, a traffic state of links connected to said respective nodes in a network; a route determining module determining, based on the obtained statistic information, at least one route for extending a plurality of paths between an ingress edge node and an egress edge node that correspond to a traffic engineering section in the network (Paragraph 0044 lines 1-21 and figure # 1 elements 130,135 and vpn path140) and a load sharing determining module determining, based on the

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obtained statistic information (Paragraph 0046 lines 1-21 and figure # 1 elements 130,135 and vpn path145) a distribution ratio at which a traffic should be distributed to respective paths on the determined route, wherein active modules among said statistic information gathering module, said route determining module and said load sharing determining module are switched over to between said ingress edge node and said network control device concentrated controlling said respective nodes, mutually. However **Kim et al.**, fails to disclose ingress edge node and said network control device concentrated concentrated controlling said respective nodes, mutually.

In the same field of endeavor, **Beshai.** clearly shows and discloses ingress edge node and said network control device concentrated controlling said respective nodes, mutually. (Column 13 line 43-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the ingress edge node and said network control device concentrated controlling said respective nodes, mutually as taught by **Beshai.** in the method of **Kim et al.**, for the purpose of achieving a statistic

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information, a traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

Consider claim 8, and as applied to claim 7 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system, wherein said ingress edge node includes an allocating module allocating packets arrived at (Paragraph 0049 lines 1-10 and figure # 1 elements 1) to the paths on said route on the basis of the distribution ratio, indicated by said load sharing determining module, at which the traffic should be distributed to the paths on the route. However, Kim et al., fails to disclose ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths.

In the same field of endeavor, **Beshai**. clearly shows and discloses ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths (Column 13 line 43-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the ratio at which the input traffic to said ingress edge node is distributed

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to each of the plurality of paths as taught by **Beshai.** in the method of **Kim et al.**, for the purpose of achieving a statistic information, a traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

Consider claim 9, and as applied to claim 7 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system, further comprising a state monitoring device including, a module gathering and judging load states of said ingress edge node and said network control device; and an indicating module switching over active modules among said statistic information gathering module, said route determining module and said load sharing determining module to between said ingress edge node and said network control device in accordance with the load states, mutually (Paragraph 0042 lines 1-10 and figure # 2, elements 110).

Consider claim 10, and as applied to claim 7 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area

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load sharing control system, wherein when said ingress edge node gathers the statistic information showing a load state in the network, said ingress edge node gathers directly the statistic information from said nodes capable of using a notification message based on a specified protocol (Paragraph 0005 lines 1-10 and figure # 5, elements 180) and gather, through said network control device, the statistic information from said nodes incapable of using the notification message based on the specified protocol (Paragraph 0007 lines 1-10 and figure # 2, elements 110, incapable as in protection state).

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Consider claim 11, and as applied to claim 7 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system, wherein if said ingress edge node does not include said load sharing determining module, said load sharing determining module of said network control device is made to operate (Paragraph 0058 lines 1-19 and figure # 3, elements 72, HQ).

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Claim 12, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., (U.S. Patent # 7,263,100 B1) in view of Beshai. (US Publication # 2002/0080790 A1) further in view of Meempat et al., (U.S. Patent # 6,904,017 B1).

Consider claim 12, and as applied to claim 7 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control system, wherein the network is an MPLS-based label switching network. However, Kim et al., as modified by Beshai. fails to disclose the network is an MPLS-based label switching network.

In the same field of endeavor, **Meempat et al.**, clearly shows and discloses network is an MPLS-based label switching network (Column 1 line 51-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the network is an MPLS-based label switching network. as taught by **Meempat et al.,** in the method of **Kim et al.,** as modified by **Beshai.** for the purpose of achieving a statistic information, a traffic state of

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links connected to said respective nodes in a network in wide area load sharing control system.

Consider claim 13, Kim et al., clearly show and disclose a wide area load sharing control system comprising: determining a distribution ratio at which an input traffic to an ingress edge node is distributed to each of a plurality of paths set up between said ingress edge node and an egress edge node that correspond to a traffic engineering section in a network (Paragraph 0042 lines 1-10 and figure # 2, elements 130) and indicating which unit, a sharing control unit corresponding to said ingress edge node or other concentration control unit, executes a process of determining the distribution ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths. However, **Kim et al.**, fails to disclose a sharing control unit corresponding to said ingress edge node or other concentration control unit.

In the same field of endeavor, **Beshai**. clearly shows and discloses a sharing control unit corresponding to said ingress edge

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node or other concentration control unit (Paragraph 0145 lines 1-10 and figure # 14 elements 95).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the a sharing control unit corresponding to said ingress edge node or other concentration control unit, as taught by **Beshai**. in the method of **Kim et al.**, for the purpose of achieving a statistic information, a traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

Consider claim 14, Kim et al., clearly show and disclose a wide area load sharing control system comprising: determining a obtaining from respective nodes, as statistic information, a traffic state of links connected to said respective nodes in a network; determining based on the obtained statistic information, at least one route for extending a plurality of paths (Paragraph 0026 lines 1-17 and figure # 1 element 30) between an ingress edge node and an egress edge node that correspond a traffic engineering section in the network (Paragraph 0027 lines 1-10 and figure # 1) determining,

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based on the obtained statistic information, a distribution ratio at which a traffic should be distributed to respective paths on the determined route (Paragraph 0039 lines 1-17 and figure # 1 element 30); and switching over processing modules of said respective steps to between said ingress edge node and control device concentrated controlling said respective nodes, mutually. However, **Kim et al.**, fails to disclose a ingress edge node and control device concentrated concentrated controlling said respective nodes, mutually.

In the same field of endeavor, **Beshai**. clearly shows and discloses ingress edge node and control device concentrated controlling said respective nodes, mutually (Paragraph 0145 lines 1-10 and figure # 14 elements 95).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the a ingress edge node and control device concentrated controlling said respective nodes, mutually as taught by **Beshai**. in the method of **Kim et al.**, for the purpose of achieving a statistic information, a traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

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Consider claim 15, and as applied to claim 14 above, Kim et al., as modified by Beshai. clearly show and disclose a wide area load sharing control method according to claim 14, further comprising: gathering and judging load states of said ingress edge node and said control device (Paragraph 0042 lines 1-10 and figure # 2, elements 110) and giving an indication of switching over the processing modules to between said ingress edge node and said control device mutually in accordance with the load states. However, Kim et al., fails to disclose ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths.

In the same field of endeavor, **Beshai.** clearly shows and discloses ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths (Column 13 line 43-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the ratio at which the input traffic to said ingress edge node is distributed to each of the plurality of paths as taught by **Beshai**. in the method of **Kim et al.**, for the purpose of achieving a statistic information, a

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traffic state of links connected to said respective nodes in a network in wide area load sharing control system.

## Conclusion

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Syed Zaidi whose telephone number is (571) 270-1779. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are

Unsuccessful, the Examiner's supervisor, Seema S. Rao can be reached on (571) 270-3174. The fax phone number for the

Application/Control

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organization where this application or proceeding is assigned is

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Any inquiry of a general nature or relating to the status of this

application or proceeding should be directed to the receptionist/

customer service whose telephone number is (571) 272-2600.

Syed s. Yat Syed Zaidi

S.Z/sz

November 15, 2007.

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SEEMA S. RAO SUPERVISORY PATENT EXAMINER

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